

REMARKS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-4, 6-11, and 13-19 are pending in this application with claims 5 and 12 having been cancelled. Claims 1, 2, 6, 7, 10, 11, and 13-19 have are herewith amended. Changes to claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicant is entitled. The Examiner is thanked for indicating that claims 2 and 11 contain allowable subject matter and would be allowable if rewritten in independent form.

II. REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 1, 3, 4, 6-10, and 13-19 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,038,087 to Archer et al. in view of U.S. Patent No. 3,732,447 to Perharts and in view of U.S. Patent No. 4,922,198 to Sandhagen et al. Claims 5 and 12 are also rejected under 103(a) as unpatentable over Archer in view of Perhars and Sandhagen, and in further view of U.S. Patent No. 4,590,814 to Wadensten.

III. RESPONSE TO REJECTIONS

Independent claim 1 for example, has been amended herein. Amended independent claim 1 recites

at least one magnet mounted on the stator, juxtaposed with the rotor and magnetically coupled thereto; and
at least one piezoelectric element that transfers the force of the magnet to output signals when the rotor rotates, the signals being useful in determining at least one of: a position, and a speed of rotation, of the motor, the magnet magnetically braking the rotor from turning when the motor is deenergized.

It is respectfully submitted that the relied upon portions of the combined references relied upon by the Examiner do not teach or suggest a magnet “mounted on the stator” and “magnetically coupled thereto.” There is no teaching or suggestion in the relied upon portions of Sandhagen that the sensor described therein would be effective if mounted on a stator of a motor. The figures and the description show the sensor located proximal to the teeth of the gear and describe the sensitivity to the gap between the sensor and the teeth. Accordingly, one of skill in the art would not expect the device of Sandhagen to be effective when mounted on a stator of a motor. One of skill in the art would expect that the stator would be a magnetic shield prohibiting the coupling between the sensor and the rotor. Further, the device in Sandhagen is directed to an entirely different art than the present invention. To this end often in the window covering art, non-ferrous gears are used, such as plastic gears. These plastic gears would not be useable in a system such as that described in Sandhagen. Moreover, in the window covering art, the gears have very small teeth and are often arranged in planetary gear sets. These features make the teeth difficult to detect even if they are made of ferrous materials.

It is also submitted that the relied upon portions of Perhats do teach or suggest a “magnetically breaking” device as recited in claim 1. Described in Perhats is a device wherein traditional friction based breaking occurs using cork pads or the like. This is different from magnetically breaking as described by the instant application.

For at least these reasons it is submitted that independent claim 1 patentably distinguishes over the relied upon portions of the cited references and is allowable. Independent claims 7 and 14 recite similar features and are therefore also allowable.

IV. DEPENDENT CLAIMS

The other claims in this application are each dependent from one of the independent claims discussed above and are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

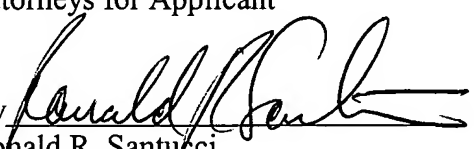
In the event the Examiner disagrees with any of statements appearing above with respect to the disclosures in the cited reference, or reference, it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicant respectfully requests early passage to issue of the present application.

Respectfully submitted,

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